

## Homework 5

Eco 10350, Prin of Macro, Kevin R Foster, Colin Powell School at CCNY

### Due 8am Friday March 8

(I think of the deadline as being midnight somewhere on the planet after class, operationalized as 8am EST in NYC on day after)

Each student should submit a separate assignment, even if it is an identical computer file to the rest of your study group. When submitting assignments, please include your name and the assignment number as part of the filename. Please write the names of your study group members at the beginning of your homework.

1. What are the names of the people currently in your study group? (could be null set for now, although I wouldn't advise that to be optimal in long run)
2. In the OpenStax textbook, please answer ~~8.32, 8.35, 8.45, 9.33 and 9.34~~ 10.43.
3. You're given the following information about production of 4 goods (Aardvarks, Bacchanal parties, Compote and Dreadnoughts) in 2016, 2017 and 2018 in the economy of Zembla.

	2016		2017		2018	
	P	Q	P	Q	P	Q
Good A	3	20	3.30	18	3.10	21
Good B	5	15	5.50	17	6.25	16
Good C	6	15	6.60	15	6.25	16
Good D	10	10	11	10	11	11

- a. What was nominal GDP in each year? What was the rate of growth from 2016-17 and 2017-18?
  - b. What was real GDP if 2016 is base year? What was rate of growth?
  - c. What was the GDP deflator in each year? What is rate of inflation as calculated from GDP deflator?
  - d. If the CPI were calculated from just goods A, B and C (since D is obviously not bought by consumers) and its basket is 4 each of A, B and C, then what would be calculated as CPI index in each year? What is CPI inflation then?
  - e. What is the difference between CPI inflation and inflation calculated from GDP deflator?
  - f. Note that from 2016 to 2017 all the prices rose by 10%, what was calculated inflation in either case? Does that seem right to you?
4. Go to the BLS website and download unemployment statistics for a particular subgroup (men or women; teens or other ages; race/ethnicity – your choice). Does this group usually have a higher or lower unemployment rate than the whole population? How large is the difference? Is that difference on average bigger or smaller when the economy is in recession? What do you think this tells about the structure of the economy?